

IN THE CLAIMS

Please amend claims 1, 5, 7 and 10 as follows:

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1. (Thrice Amended) A method for representing to an application the characteristics of an underlying connection-oriented device over known application-level interfaces and allowing an application to take advantage of a connection-oriented I/O subsystem having an integrating component over the known application-level interfaces and without requiring the application programmer to program directly to the integrating component, the method comprising:

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representing to an application, over a first known application-level interface associated with the integrating component, the connection control characteristics of the underlying connection-oriented device related to the manner in which the connection-oriented device makes a connection for sending and receiving network data over a network, wherein the integrating component is positioned between the application and a connection-oriented device driver associated with the connection-oriented device;

representing to the application, over a second known application-level interface associated with the integrating component, the data and data control characteristics of the underlying connection-oriented device;

receiving, by the integrating component, a command from the application over the first known application-level interface;

receiving, by the integrating component, a command from the application over the second known application-level interface; and

by the connection-oriented device driver, interacting with the integrating component in order to execute said received commands so that the application may take

advantage of the connection-oriented I/O subsystem and use the connection-oriented device using the known application-level interfaces and without requiring the application programmer to program to an interface of the connection-oriented device driver.

5. (Twice Amended) A connection-oriented driver subsystem where connection control information is communicated to an application through a connection interface while data and data control information is communicated through a transport interface, the driver subsystem comprising:

a connection-oriented device driver controlling a connection-oriented hardware device;

a data transport capable of communication with an application;

an integrating component that interfaces with the connection-oriented device driver and the data transport, said connection-oriented device driver and said data transport serving as clients to said integrating component, wherein said integrating component is positioned between the application and the connection-oriented device driver, said integrating component:

providing an abstracted connection interface that is available to a client that allows the client to create a connection with a desired location using the connection-oriented hardware device; and

providing facility for associating the connection with the data transport, thereby allowing the client to send and receive data and data control information over the connection; and

a proxy client component that interfaces with the connection interface and the transport interface of the integrating component as a client, said proxy client component:

receiving abstract connection creation commands and abstract connection control commands from the application and implementing said commands through use of the connection interface to create and manage the connection;

causing redirection of data and data control information from the connection through the proxy client component to a designated data transport designated in one of the abstract connection control commands; and

returning to the application, in response to a previously received connection control command, an identifier to be used by the application for receiving data and data control information from the designated data transport so that the connection control information is communicated to the application through the proxy client component while the data and data control information is communicated to the application through the designated data transport.

7. (Thrice Amended) A computer program product for interacting with known application-level interfaces and an integrating component of a connection-oriented I/O subsystem in order to represent the characteristics of an underlying connection-oriented device to an application and allow an application to take advantage of the connection-oriented I/O subsystem over the known application-level interfaces without requiring the application programmer to program to a new interface, said computer program product comprising:

a computer-readable medium; and

computer-executable instructions carried on said computer-readable medium for performing the steps of:

representing to an application, over a first known application-level interface associated with the integrating component, the connection control characteristics of the underlying connection-oriented device related to the manner in which the connection-oriented device makes a connection for sending and receiving network data over a network, wherein the integrating component is positioned between the application and a connection-oriented device driver associated with the connection-oriented device;

representing the data and data control characteristics of the underlying connection-oriented device to the application over a second known application level interface associated with the integrating component;

receiving, by the integrating component, a command from the application over the first known application-level interface;

receiving, by the integrating component, a command from the application in the second known application-level interface; and

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by the connection-oriented device driver, interacting with the integrating component to execute said received commands.

10. (Twice Amended) A method for representing to an application the characteristics of an underlying connection-oriented device over known application-level interfaces and allowing an application to take advantage of a connection-oriented I/O subsystem having an integrating component over the known application-level interfaces and without requiring the application programmer to program directly to the integrating component, the method comprising:

separating connection control characteristics from data and data control characteristics received from an underlying connection-oriented device;

representing to an application, over a first known application-level interface associated with the integrating component, the connection control characteristics of the underlying connection-oriented device related to the manner in which the connection-oriented device makes a connection for sending and receiving network data over a network, wherein the integrating component is positioned between the application and a connection-oriented device driver associated with the connection-oriented device;

representing to the application, over a second known application-level interface associated with the integrating component, the data and data control characteristics of the underlying connection-oriented device;

receiving, by the integrating component, a command from the application over the first known application-level interface;

receiving, by the integrating component, a command from the application over the second known application-level interface; and

by the connection-oriented device driver, interacting with the integrating component in order to execute said received commands so that the application may take advantage of the connection-oriented I/O subsystem and use the connection-oriented device using the known application-level interfaces and without requiring the application programmer to program to an interface of the connection-oriented device driver.
